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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,973	11/26/2001	Hye-Dong Kim	06161.0012.NPUS00	5327
7590 10/07/2003				
MCGUIRE WOODS LLP 1750 TYSONS BOULEVARD SUITE 1800 MCLEAN, VA 22102				
EXAMINER SEFER, AHMED N				
ART UNIT		PAPER NUMBER		
2826				

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/991,973	KIM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	A. Sefer	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) 13-24 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

1. Examiner acknowledges the submitted translation of the foreign application and that Fujii et al US PG-Pub 2003/0052869 is not available as a prior art.

### ***Response to Amendment***

2. In the amendment filed on 8/19/03, the Applicant listed Claims 6-8 as being previously amended. However, Examiner would like to remind the Applicant that claims 6-8 and 25 have been cancelled by the amendment filed on 4/18/03.
3. The indicated allowability of claims 1, 3-5 is withdrawn in view of the newly discovered reference(s) to Hirano et al. US PG-Pub 2003/0171060. Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano USPN 6084579 in view of Hirano et al. US PG-Pub 2003/0171060.

Hirano discloses in figs. 10-13 an organic EL device, comprising a thin film transistor (TFT) array substrate including a first insulating substrate 2, a TFT 60 with a conductive interface pad 73 connected thereto and a capacitor 72 formed on the first insulating substrate;

and an organic EL substrate including a second insulating substrate (not shown, but is conventional), a transparent electrode 9, an organic EL layer and a transparent metal electrode 5, wherein the conductive interface pad is directly connected to the transparent metal electrode, but does not specifically disclose an organic EL substrate including a metal electrode.

Hirano et al disclose (sec fig. 13, page 1, par. 0011 and abstract) an EL layer including a metal electrode A.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teachings of Hirano et al with Hirano's device since that would improve emission efficiency of the device.

6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano in view of Hirano et al as applied to claim 1 above, and further in view of Codama USPN 6,091,196.

The combined references disclose the device structure as recited in the claim, but fail to disclose a protection film.

Codama discloses (sec col. 3, lines 25-42) a protection film that prevents external oxygen and moisture from permeating.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate Codama's teachings since that would provide the needed device protection.

As to claim 4, Codama discloses (sec col. 13, lines 1-4) SiNx layer and a SiO.sub.2. As to the said protection film being formed by depositing a SiNx layer and a SiO.sub.2 layer at least once refers to a process and "product by process" claims are directed to the product per se, no

matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685 and *In re Thorpe*, 227 USPQ 964, 966. Therefore, the way the product was made does not carry any patentable weight as long as the claims are directed to a device. Further, note that the applicant has the burden of proof in such cases, as the above case law makes clear. Also see MPEP 2113.

As to claim 5, Codama discloses (see col. 10, lines 54-67 and col. 13, lines 15-30) a UV-curable agent sealant.

7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano in view of Hirano et al as applied to claim 1 above, and further in view of Kuribayashi et al. USPN 6,175,345.

The combined references disclose the device structure as recited in the claim, but fail to disclose a protection film.

Kuribayashi et al disclose (see col. 9, lines 27-49) a protection film that prevents external oxygen and moisture from permeating.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teachings Kuribayashi et al since that would provide the needed device protection.

As to claim 4, said protection film being formed by depositing a SiNx layer and a SiO<sub>2</sub> layer at least once refers to a process and "product by process" claims are directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685 and *In re Thorpe*, 227 USPQ 964, 966. Therefore, the way the product was made does not carry any patentable weight as long as the claims are directed to

a device. Further, note that the applicant has the burden of proof in such cases, as the above case law makes clear. Also see MPEP 2113.

*Allowable Subject Matter*

8. Claims 9-12 are allowed.

*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. KUBO et al. (JP 11-101992) disclose an LCD with an enhanced luminance.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (703) 605-1227.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601.

ANS  
September 27, 2003

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